

REMARKS

This paper is submitted in response to the Office action mailed on April 6, 2007. This paper amends claims 1-3, 7-9, 12-17 and 22. Accordingly, after entry of this Amendment and Response, claims 1-23 will be pending.

I. Double Patenting

Claims 1-23 are rejected on the grounds of non-statutory obviousness-type double patenting as being unpatentable over claims 1-9, 11-23 and 25 of U.S. Patent No. 6,704,927 (hereafter "'927 patent"). Applicant is concurrently filing a terminal disclaimer and certifies that the present application and the '927 patent have common ownership as required by 37 C.F.R. §1.321(c).

II. Claim Rejections Under 35 U.S.C. § 101

Claims 15-22 are rejected under 35 U.S.C. § 101 as being directed to non-statutory subject matter. Claims 15 and 22 are independent claims and are addressed first. For at least the following reasons, the Applicant believes that the amended claims are allowable.

A. Claims 15-21 are directed towards statutory subject matter

Claim 15 is rejected under 35 U.S.C. § 101 as being directed to non-statutory subject matter. Specifically, the Office Action indicates that the claim language "computer-readable medium" refers to paragraph [0035] of the specification, thereby encompassing non-tangible implementations of computer-readable media into the claim language. In response, the specification has been amended to remove the language referring to non-tangible implementations of computer-readable medium. Therefore, the claimed invention is now directed to statutory subject matter and the Applicant respectfully requests the Examiner withdraw the rejection and allow this claim.

Claims 16-21 depend directly from independent claim 15 and are therefore likewise allowable. The Applicant thus respectfully requests the Examiner withdraw the rejections and allow these claims.

B. Amended claim 22 is directed towards statutory subject matter

Claim 22 is rejected under 35 U.S.C. § 101 as being directed to non-statutory subject matter. Specifically, the Office Action indicates that the claim language is directed to software, per se. In response, claim 22 has been amended to include "a computer readable storage medium that stores the computer code." Antecedent basis for this amendment can be found in the specification, specifically paragraph [0035] and Figure 2 which provide for a computer-readable storage medium "to store and retrieve software programs." See *Present Application Paragraph 0035 and Fig. 2*. Therefore, Claim 22 enables an underlying functionality to occur and is directed to statutory subject matter.

For at least this reason, the Applicant believes that the claim 22 is allowable and respectfully request that the Examiner withdraw the objection to the claim under § 101.

III. Claim Rejections Under 35 U.S.C. § 112

Claims 2, 3, 7-9, 13, 14, 16 and 17 are rejected under 35 U.S.C. § 112, second paragraph as being indefinite for failing to particularly point out and distinctly claim the subject matter that Applicant regards as the invention. Applicant has amended claims 2, 3, 7-9, 13, 14, 16 and 17 to remove the term “substantially.” Applicant believes these amendments are sufficient to overcome this rejection.

IV. Claim Rejections Under 35 U.S.C. § 103

Claims 1-23 are rejected under 35 U.S.C. §103(a) as being unpatentable over Optimization of Objected-Oriented Programs Using Static Hierarchy Analysis, August 1995, ECOOP 95-Object-Oriented Programming, Ninth European Conference to Dean et al (hereafter “Dean”) in view of U.S. Patent No. 6,260,075 to Cabrero et al. (hereafter “Cabrero”). A prima facie case of obviousness requires that “the prior art reference (or references when combined) must teach or suggest all the claim limitations.” See *MPEP* § 2143. Claims 1, 9, 12, 15, 22 and 23 are independent claims and are addressed first. Claims 2-8, 10, 11, 13, 14, 16-21 are dependent claims and are addressed second. For the several reasons recited below, it is respectfully submitted that Dean and Cabrero do not make any of the claims obvious.

A. Independent claims 1, 12, 15, 22 and 23 are not obvious in light of Dean and Cabrero

As amended, claim 1 states, “adding dependency information to the function at run-time, wherein the dependency information is arranged to indicate a status of the function, the dependency information including class information, name information, and signature information associated with the process, wherein the status of the function is arranged to indicate a validity of the function and a compilation status of the function.” Applicant respectfully submits that Cabrero does not disclose this limitation of claim 1. The Office Action submits that Cabrero discloses this limitation by stating, “Cabrero discloses an abstraction layer that allows tasks to share common libraries at runtime. Cabrero’s abstraction mechanism proves, amongst other things, description of service to wrapper functions to perform a requested function (9:39 – 11:57).” See *Office Action*, page 9, last paragraph. Applicant submits that tasks sharing common libraries at runtime is insufficient to disclose the above limitation of claim 1. Specifically, sharing of common libraries at runtime is not the same as adding dependency information to the function at runtime, wherein the dependency information indicates a status of the function and includes class, name and signature information associated with the process.

In contrast, Cabrero merely refers to tasks sharing common libraries. Cabrero fails to disclose that the common libraries include dependency information that indicates a status of the function nor the inclusion of class, name and signature information associated with the process.

Further, the Office Action summarizes that Cabrero's abstraction mechanism proves, amongst other things, description of service to wrapper functions to perform a requested function. Cabrero discloses, "each runtime environment must provide wrapper routines that conform to the declarations given in the above description of services implemented as OS abstractions. These wrapper functions, in turn, call the environment-specific function(s) to perform the requested operation." *See Cabrero, col 10, lines 48-53*. In summary, Cabrero is merely disclosing that a wrapper function is calling other functions to perform requested operations. This is not the same as adding dependency information to a function at run-time. Nor is there any disclosure of the contents of the dependency information including a status of the function or class, name and signature information of the process included in the function. As such, Cabrero fails to disclose this limitation of claim 1. Hence, claim 1 is patentable under 35 U.S.C. §103(a) over Cabrero.

As set forth above, independent claims 12, 15, 22 and 23 are also rejected under 35 U.S.C. § 103(a) as being obvious by the combination of Dean and Cabrero. As stated by the Examiner in the Office Action, independent claims 12, 15, 22 and 23 substantially include the same limitations of claim 1, namely, "adding dependency information to the function at run-time, wherein the dependency information is arranged to indicate a status of the function." For at least the reasons cited above with respect to claim 1, the combination of Dean and Cabrero do not disclose all the limitations of claims 12, 15, 22 and 23. Thus, claims 12, 15, 22 and 23 are patentable under 35 U.S.C. § 103(a) over Dean in view of Cabrero.

B. Independent claim 9 is not obvious in light of Dean and Cabrero

As amended, claim 9 states, "inspecting a compiled function associated with the system during run-time, the compiled function including dependency information, the dependency information being arranged to indicate a validity status of the compiled function and the optimization status of the compiled function." Applicant respectfully submits that Dean does not disclose this limitation of claim 9. The Office action submits that Dean discloses this limitation in section 2.2.2 Method Applies-To Sets. *See Office action, page 13, second paragraph*. Applicant submits that no portion of section 2.2.2. discloses inspecting a compiled function associated with the system during run-time, the compiled function including dependency information, the dependency information being arranged to indicate a validity status of the compiled function and the optimization status of the compiled function. Specifically, section 2.2.2. mentions nothing about dependency information indicating a validity status of the compiled function. In contrast, Dean discloses the comparison of whole

sets of classes at once. Each set of classes are being pre-computed where a given method is the appropriate target. No mention is made of compiled functions and whether the included dependency information indicates a validity of the function. As such, Dean fails to disclose this limitation of claim 9. Hence, claim 9 is patentable under 35 U.S.C. §103(a) over Dean in view of Cabrero.

C. Dependent claims 2-8, 10, 11, 13, 14 and 16-21 are not obvious in light of Dean and Cabrero

Dependent claims 2-8, 10-11, 13-14 and 16-21 depend upon and contain all the limitations of independent claims 1, 9, 12, and 15 respectively. Therefore, for at least the reasons mentioned above, Dean and Cabrero do not disclose each and every limitation of claims 2-8, 10, 11, 13, 14 and 16-21. As such, claims 2-8, 10, 11, 13, 14 and 16-21 are patentable under 35 U.S.C. § 103(a) over Dean in view of Cabrero.

V. Conclusion


This Amendment is submitted contemporaneously with a petition for a three-month extension of time in accordance with 37 CFR § 1.136(a) and a Terminal Disclaimer. Accordingly, please charge Deposit Account No. 04-1415 in the amount of \$1,180.00 (\$1,020.00, for a three-month extension of time fee and \$130.00 for a Terminal Disclaimer fee). The Applicant believes no further fees or petitions are required. However, if any such petitions or fees are necessary, please consider this a request therefor and authorization to charge Deposit Account No. 04-1415 accordingly.

The Applicant thanks the Examiner for his thorough review of the application. The Applicant respectfully submits the present application, as amended, is in condition for allowance and respectfully requests the issuance of a Notice of Allowability as soon as practicable.

If the Examiner should require any additional information or amendment, please contact the undersigned attorney.

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Respectfully submitted,



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